09/462,876

Amendments to the Claims

- 1. (Previously presented) A cutting tool comprising, as an edge part, a cubic boron nitride sintered compact containing cubic boron nitride having an average grain diameter of at most 1 μm, in which the cubic boron nitride sintered compact has, at the said edge part, an I (200), /I(111) of (220) diffraction intensity (I(200) to (111) diffraction intensity I(111) ratio of at least 0.05 in X-ray diffraction of arbitrary direction and impurities are substantially not contained in the grain boundaries, wherein the traverse rupture strength of the said cubic boron nitride sintered compact is at least 80 kgf/mm² by a three point bending measurement at a temperature between 20°C and 1000°C and the thermal conductivity of the cubic boron nitride sintered compact, at the said edge part, is 250 to 1000 W/m·K.
 - 2. (Cancelled)
 - 3. (Cancelled)

(Original) The cutting tool as claimed in claim 1, wherein the hardness of the cubic boron nitride sintered compact, at the said edge part, is at least 4000 kgf/mm² at room temperature.

(Previously presented) The cutting tool as claimed in claim 1, wherein the thermal conductivity of the cubic boron nitride sintered compact, at the said edge part, is 300 to 100 w/m-K.

09/462,876

 \mathcal{G} . (Previously presented) The cutting tool as claimed in claim 1, wherein the thermal expansion coefficient of the cubic boron nitride sintered compact, at the said edge part is 3.0 to 4.0 x 10^{-6} /K at a temperature ranging from 20°C to 600°C.

(Ja)

(Previously presented) The cutting tool as claimed in claim 1, which is applied to a face milling cutter or end mill for high speed cutting cast irons or steels.

8. (Previously presented) The cutting tool as claimed in claim 1, wherein the cubic boron nitride sintered compact, at the said edge part, contains cBN with an average grain diameter of at most 0.5 µm.

thatlet a land.

e graphic to the second

9 and 10. (Cancelled)